

Abstracts

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to the total number of screening procedures performed, colonoscopies increased 60% (20% to 32%; $p = 0.01$), flexible sigmoidoscopy decreased 75% (8% to 2%; $p = 0.01$), barium enema decreased 50% (2% to 1%; $p = 0.01$), and FOBT decreased 6% (70% to 66%). Gastroenterologists performed an increasingly large proportion of the colonoscopy procedures (68% in 2000 vs. 73% in 2004). **CONCLUSIONS:** Colorectal cancer screening in the private sector increased between 2000 and 2004. During this time, there was a substantial increase in the use of colonoscopy and a marked decrease in the use of flexible sigmoidoscopy and barium enema. Additional research is needed to track trends in these procedures and evaluate their impact on health policy goals, patient outcomes, and system capacity.

CN4

COMPARISON OF EPOETIN ALFA AND DARBEPOETIN ALFA TREATMENT COSTS IN AN INPATIENT ONCOLOGY SETTING

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OBJECTIVES: Epoetin alfa (EPO) and darbepoetin alfa (DARB) are two erythropoietic stimulating therapies (ESTs) indicated for the treatment of chemotherapy-induced anemia. This analysis compared recent dosage patterns and associated drug costs of EPO and DARB in hospitalized cancer patients. **METHODS:** An analysis of electronic inpatient hospital records from the Premier Perspective Comparative Hospital Database was conducted. Study subjects were identified through hospitalizations recorded between July 2002 and March 2005 from over 500 hospitals nationwide. Included were patients ≥ 18 years of age with a primary admitting diagnosis of cancer who were treated with EPO or DARB during their hospital stay. Patients who had received renal dialysis were excluded. To minimize effect of outliers, 5% of patients with extreme doses in each group were excluded from the dosing analysis. Wholesale acquisition costs in 2005 (EPO: \$0.01217/Unit, DARB: \$4.36/mcg) were used to calculate EST costs. **RESULTS:** A total of 27,804 patients were identified (EPO: 24,814, DARB: 2990). Mean age and gender distribution were comparable between groups (age: EPO 65.3 years, DARB 64.5 years; % women: EPO 53%, DARB 55%). Mean cumulative dose per inpatient stay was EPO $61,656 \pm 50,274$ Units and DARB 259 ± 340 mcg, corresponding to a dose only ratio of 238:1 (Units EPO: mcg DARB). Average treatment cost was significantly lower in the EPO group, compared to DARB (EPO: \$750, DARB: \$1129; $p < 0.0001$). **CONCLUSION:** This analysis utilizing inpatient data demonstrated a dose only ratio between EPO and DARB of 238:1 in patients with cancer. DARB was found to cost 51% more than EPO based on the cumulative dose administered during hospitalization.

CARDIOVASCULAR

CVI

INCREMENTAL EXPENDITURE OF TREATING HYPERTENSION IN THE UNITED STATES

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OBJECTIVES: The objective of this study was to determine incremental direct expenditures of treating hypertension in the U.S. non-institutionalized population. **METHODS:** Analysis of 2001 Medical Expenditure Panel Survey (MEPS) data, a national

probability sample survey of 33,556 individuals from the civilian non-institutionalized U.S. population was conducted. Hypertensive patients were identified as those with hypertension based ICD-9 codes, i.e., 401-xx-405-xx for medical conditions or medical events, including inpatient visits, outpatient visits, emergency room visits, home-health visits, office-based medical provider visits, and other medical expenses, or patients who self-reported being diagnosed with hypertension by their physician, or patients who were prescribed an anti-hypertensive medication listed in seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of Hypertension, unless there was an indication that the medication was prescribed for a medical condition other than hypertension. Only individuals 18 years of age or older were included. Incremental expenditures for treating hypertension were estimated through least squares regression adjusting for age, gender, race, education, and co-morbidities using the D'Hoore version of the Charlson co-morbidity index. Sample data were projected to the U.S. population and 95% confidence limits for estimates were calculated using the Taylor expansion method. **RESULTS:** Sample estimates projected to the population indicated that approximately 17.4% of individuals aged 18 years and above in the ambulatory population have hypertension. Total incremental annual direct expenditures for hypertension patients were estimated to be more than \$US 54.0 billion in 2001 after adjusting for demographics and co-morbidities. Mean incremental annual direct expenditures for an individual with hypertension was \$US 1131. Prescription medicines, inpatient visits, and outpatient visits constituted more than 90% of overall incremental expenditures. **CONCLUSIONS:** With incremental direct medical expenditures estimated at nearly \$US55.0 billion, hypertension expenditures represent a significant amount of health care resource utilization.

CV2

IMPACT OF VENTRICULAR ARRHYTHMIA ON MORTALITY, HEALTH CARE UTILIZATION AND COST IN HOSPITALIZED ACUTE MYOCARDIAL INFARCTION PATIENTS

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OBJECTIVES: To determine the impact of ventricular arrhythmia on mortality and health care resource utilization in hospitalized patients with acute myocardial infarction (AMI). **METHODS:** A retrospective cohort study design was used. Adult patients with primary diagnosis of AMI (ICD-9 code: 410.x1), between July 2003 and June 2004, were identified from a large retrospective database of 800 hospitals in the United States. The AMI patients were further classified based on secondary diagnosis of ventricular arrhythmia into three groups: AMI with sustained ventricular tachycardia (sustained VT)/ventricular fibrillation (VF) (ICD-9 code: 427.4x, 427.5); AMI with paroxysmal ventricular tachycardia (PVT) (ICD-9 code 427.1); and AMI without ventricular arrhythmia. Mortality rates, length of hospital stay and cost were compared between the groups using chi-square and ANOVA tests. **RESULTS:** A total of 91,225 patients with primary diagnosis of AMI were identified, of which 8125 (8.9%) patients had a secondary diagnosis of ventricular arrhythmia, including sustained VT/VF ($N = 3004$; 3.3%) and PVT ($N = 5121$; 5.6%). A majority of the AMI patients with ventricular arrhythmia were male (70.2%), caucasian (73.4%) and ≥ 65 years (55%). In-hospital mortality rates were higher in the AMI patients with sustained VT/VF (28.5%) and PVT (7.9%), than AMI patients without ventricular arrhythmia (6.2%). The average hospital length of stay was significantly higher ($p < 0.001$) in AMI patients with sustained VT/VF ($8.0 \pm$